EDISON ELECTRIC INSTITUTE

AFTER THE DISASTER:

Utility Restoration Cost Recovery

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TABLE OF CONTENTS

EXECUTIVE SUMMARY

Several methods currently are used by utilities to lessen the financial impact of disaster restoration costs. But there is little consistency in how these methods are applied throughout the industry, or even within a company, from disaster to disaster. This creates uncertainty and invites political intervention. A formal and uniformly applied structure for disaster restoration cost recovery is needed.

When large storms or other disasters damage electric systems, utilities launch massive round-the-clock efforts to restore power as quickly as possible. The logistics associated with these restoration efforts can be daunting. In addition to deploying their own crews, utility companies must call upon crews from other parts of the country to help, with the "host utility" paying for wages, equipment rental, transportation, hotel rooms, meals and even laundry. Added to that are equipment costs, miles of new wire, thousands of new poles, new transformers, cross arms, fuses—the list goes on and on and so do the costs.

The key is restoring power as quickly as possible. Utilities mobilize outside resources at substantial additional costs in their effort to shorten the duration of power outages. When the final costs are tallied, the utility gets a bill that can be devastating financially.

Often there is not an established plan for how this bill will be paid. When the utilities meet with their regulators to discuss disaster restoration costs, the process often becomes highly politicized, and in at least one instance, the ensuing uncertainty has invoked a negative reaction from Wall Street.

To better understand the costs of disasters to utilities and their financial consequences, this report examines restoration cost data for 81 major storms that occurred between 1994 and 2004. The report also summarizes techniques used throughout the electric utility industry to mitigate the potentially devastating financial impacts of these storms and calls for the development of a more consistent and predictable method for recovering the cost of restoration when disaster strikes.

The Summary Points

- Utilities incur substantial costs to repair their systems after disasters strike. Based on survey data obtained for 81 major storms from 14 utility respondents, these disasters cost utilities approximately $2.7 billion (in constant $2003) between 1994 and 2004.

- The economic impact of not having electric service in an area hit by a disaster is much larger than the cost of repairing the damage. This suggests that the utilities' current practice of incurring additional costs to mobilize outside resources to restore power as quickly as possible is appropriate.

- The financial impact of disaster restoration can be devastating if it is not mitigated. For some companies, restoration costs can exceed net operating income for the year

- Several utilities rely on special storm reserves and/or deferred accounting treatment to lessen the financial impact of disasters.

- In at least one instance, Wall Street changed its credit outlook for a utility, in part because of concerns over how quickly a decision favorable to the utility would be reached to mitigate the financial impact of restoration expenses.

- There is little consistency in establishing which events do, or do not, qualify for disaster mitigation. For example, one company was required to expense approximately $160 million of O&M storm costs associated with a major hurricane against current year earnings, while another utility was allowed to recover a $1 million storm expense over a four-year period.

- Storm reserves provide a type of self-insurance to pay for major storms, however, they may not be funded sufficiently to pay for catastrophic storms. In most instances these reserves do not provide a ready source of cash to pay for storms.

- When faced with significant O&M restoration costs that could require a substantial write-off, many companies are granted permission by their commissions to defer these costs, but there is often a lengthy delay in providing this relief and the approval process can become politicized.

INTRODUCTION

Over a six-week period beginning Aug. 13, 2004, four hurricanes struck Florida. Never before in the state's history had so many hurricanes hit in a single season. The scale of the destruction caused by the storms was also unprecedented, with one in five homes suffering damage.

The impact on Florida's investor-owned electric utilities was equally destructive. The hurricanes required the state's investor-owned utilities to replace more than 3,000 miles of wire—enough to reach from Tampa to San Diego, almost 32,000 poles and more than 22,000 transformers. *(See Figure 1.)*

Figure 1
Florida 2004 Hurricane Damage[1]

	Poles Replaced	Transformers Replaced	New Conductor (Miles)
Hurricane Charley			
FPL	7,100	5,100	900
Progress Energy	3,820	1,880	667
Hurricane Frances			
FPL	3,800	3,000	550
Progress Energy	2,800	1,560	500
Hurricane Ivan			
Progress Energy	100	570	N/A
Gulf Power	5,060	3,175	225
Hurricane Jeanne			
FPL	2,300	3,000	250
Progress Energy	6,720	4,010	100
TOTAL	31,700	22,295	3,192

Source: Company reports
[1] Comparable storm damage data for Tampa Electric is not available

The combined storm costs totaled more than $1 billion for Florida Power & Light and Progress Energy alone. Uncertainty over how this bill would be paid caused Standard and Poor's to downgrade its outlook for Progress Energy from stable to negative, citing "uncertainties regarding the timing of hurricane costs" as one of the triggering events for the outlook revision.[1]

FPL fared better. It went into the hurricane season with approximately $345 million ($211 million in cash and $134 million in deferred taxes) set aside in a special storm reserve fund that it had established in the 1940s. Still, FPL was left with a repair bill of more than $545 million. Fortunately for FPL, the Florida Public Service Commission allowed it to carry the remainder of the unpaid storm bill as a negative balance in

[1] "Progress Energy Florida, Inc's Petition for Approval of Storm Cost Recovery Clause for Extraordinary Expenditures Related to Hurricanes Charley, Frances, Jeanne, and Ivan," Nov. 2, 2004, Florida Public Service Commission.

its storm fund thereby negating the earnings impact of the loss.[2] Questions remain on just how this bill will be paid and how the storm reserve will be refunded to provide a cushion for the next hurricane strike.

When the hurricanes struck Florida—and for that matter, whenever a major storm strikes—the affected utility is expected to mobilize a huge workforce to repair the storm damage as quickly as possible, with little or no consideration being given to the cost of the restoration effort.

There are vastly different policies in place around the country on how utilities recover these costs. In some cases, utilities are expected to pay for the costs and charge them against current year earnings. Had this been the policy in Florida, the financial consequences could have been devastating.

Paying for Storms in Hurricane Alley

FPL's service territory encompasses almost the entire east coast and parts of the west coast of Florida, making the company particularly vulnerable to damage from hurricanes. To help mitigate the financial impact of a catastrophic storm, FPL funds its storm reserves with cash payments invested in interest-bearing accounts. FPL is unique in the industry in this regard. This "funded" reserve minimizes the earnings impact of major storms and provides a source of cash to pay for storm costs.

In other instances, there appears to be an unwritten rule that when restoration costs become significant, the utility will be allowed to petition its utility commission to recover its prudently incurred costs by assessing its customers a surcharge or paying for the costs out of earnings over a fixed period of time, usually two to five years. There are also a number of companies, like FPL, whose commissions authorize the creation of special storm reserves that are credited each month. When disasters strike, these funds act as a form of insurance, mitigating the one-time financial impact.

The goal of this report is to look beyond Florida to assess the impact that disasters have on the broader electric utility industry and provide insight into how to pay the heavy price tag incurred as a result of these events. The report contains three major sections. The first summarizes a recent industry survey and provides a historical perspective on storm restoration costs. The second presents data showing the potential financial impact of these storms. The final section of the report looks at how storms are paid for and examines the accounting treatment for major storm costs and the cost-recovery policies that have been developed to help address the devastating financial impact of major storms on utilities.

[2] The Florida Public Service Commission also allowed Progress Energy, Tampa Electric and Gulf Power to carry negative balances in their storm reserve accounts.

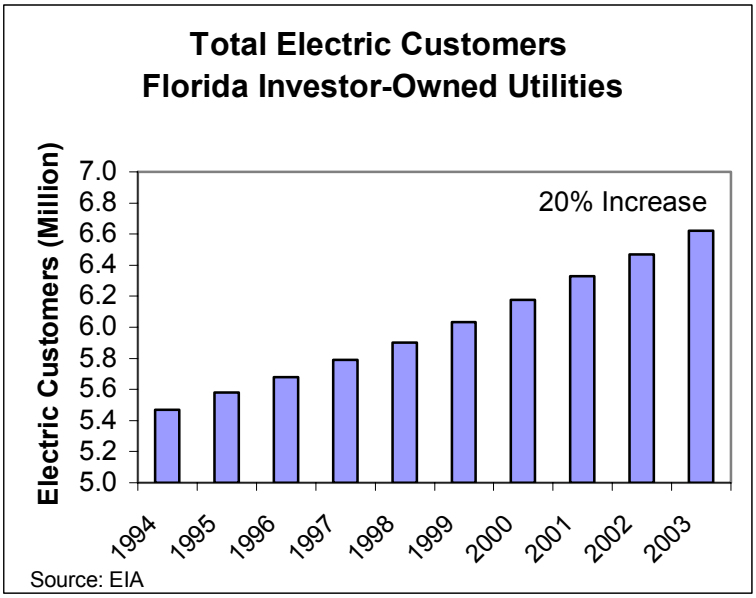
HISTORICAL PERSPECTIVE ON MAJOR STORM COSTS

To obtain a better understanding of the financial impact of major storms at a broader industry level, EEI member companies were asked to complete a survey providing information on storm costs and customer impacts. (*See sample survey in Attachment A, page 17.*) This data was then correlated with financial data obtained from FERC Form 1s to develop several key financial measures of the overall impact of major storms. Figure 2 provides a compilation of the data received from 14 companies for 81 major storms that caused almost $2.7 billion ($2003) in damage. (*See page 4.*)

Figure 3 summarizes major storm costs in constant $2003 obtained from the survey between 1994 and 2004. For the entire period, the average cost of a major storm was $48.7 million. The cost of an individual storm was as high as $890 million. If the five largest storms are deleted however, the average storm cost decreases by over 60 percent to $18.2 million. Four out of the five most expensive storms identified in the survey occurred since 2000 and three of those four were hurricanes. (*See page 5.*)

Increasing Storm Costs

In addition to the frequency and severity of a storm, another major driver in storm costs is customer growth. As populations expand, utilities are required to expand their electric systems to serve more new customers. As a result, even if the severity and frequency of storms remains consistent with historical levels, storm costs can be expected to increase simply because there is more electric equipment subject to damage from storms.



For example, during the 10-year period from 1993 to 2004, Florida utilities expanded their electric systems to serve approximately 1 million additional customers. This 20 percent increase in customers likely contributed significantly to the total costs Florida utilities incurred to repair their electric systems after the 2004 hurricanes.

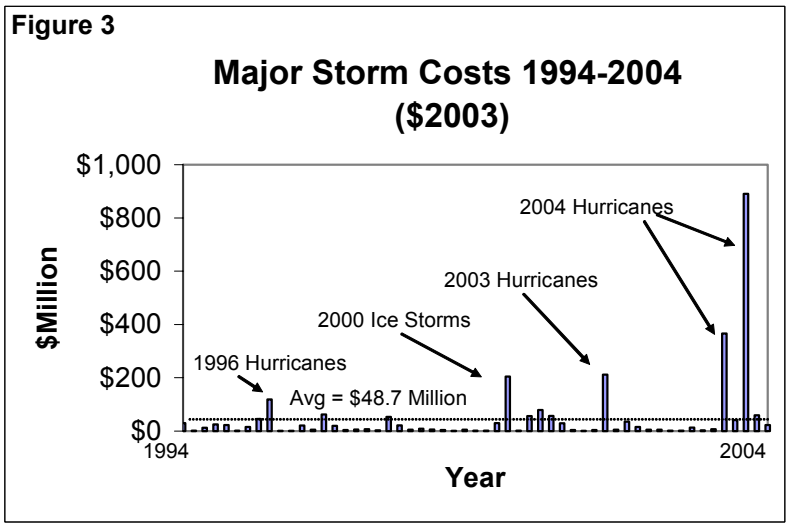
Figure 2: Storm Survey Summary Results (Current Year $)

Major Storm Event	Date	Storm Data			FERC Form 1 Data	
		Outage Duration (Days)	Restoration Cost ($Million)	Accounting Treatment	T&D O&M Expenses ($Million)	Total Earnings From Electric Operations ($Million)
Ice Storm	Feb-94	16	$25.3	Reserve	$53.9	$216.6
Thunderstorm	Jun-95	4	$1.9	Expensed	$41.2	$167.0
WIND STORM & SNOWSTORM	Oct-96	6	$11.3	Deferral	$41.4	$177.9
Ice Storm	Nov-96	10	$21.8	Expensed	$45.7	$112.3
Snow/ice storm	Dec-96	6	$19.6	Deferral	$86.1	$200.6
WINTER STORMS	1996	6	$1.6	Expensed	$31.5	$66.9
HURRICANES & ICE STORM	1996	9	$14.1	Expensed	$147.7	$773.3
HURRICANE & ICE STORM	1996	17	$40.4	Expensed	$218.7	$858.5
HURRICANES	1996	14	$103.6	Deferral	$86.2	$514.1
Thunderstorm	Jun-98	2	$1.3	Expensed	$45.3	$184.2
Hurricane	Aug-98	4	$18.4	Deferral	$98.7	$604.0
Wind storm	Nov-98	2	$4.8	Expensed	$84.8	$218.1
Ice Storm	1998		$56.0	Deferred	$68.6	$98.6
HURRIANE & ICE STORM	1998	13	$18.1	Expensed	$169.3	$600.7
SUMMER STORMS	1998	5	$4.1	Expensed	$34.8	$115.5
Ice Storm	Jan-99	4	$5.4	Expensed	$176.1	$933.9
Ice Storm	Jan-99	5	$6.9	Reserve	$63.5	$138.5
Thunderstorm	Jul-99	5	$3.2	Expensed	$51.6	$224.5
Hurricane	Sep-99	6	$48.0	Deferral	$119.4	$589.4
HURRICANES	1999	13	$20.4	Expensed	$208.7	$751.4
WIND STORMS	1999	2	$4.4	Expensed	$93.4	$227.0
SUMMER & WINTER STORMS	1999	12	$8.4	Expensed	$36.5	$130.5
Ice Storm	Jan-00	4	$5.7	Expensed	$195.1	$824.4
Thunderstorm	May-00	4	$3.4	Expensed	$35.1	$65.3
Thunderstorm	Jul-00	2	$1.2	Expensed	$37.3	$142.2
SUMMER STORMS	Aug-00	8	$5.0	Expensed	$57.5	$139.6
Windstorm	Dec-00	2.9	$2.1	Expensed	$49.3	$143.6
Wind Storm	Dec-00	3	$2.3	Expensed	$88.3	$309.4
WINTER STORM & THUNDERSTORM	2000	13.5	$28.0	Expensed	$210.5	$945.9
ICE STORMS	2000	16	$190.0	Reserve	$78.8	$211.6
Thunderstorm	Jun-01	3	$1.6	Expensed	$62.1	$196.7
Ice Storm	Jan-02	9	$54.7	Deferral	$62.1	$196.7
Ice Storm	Dec-02	9	$77.0	Expensed	$259.5	$895.3
Ice Storm	Dec-02	6	$55.0	Deferral	$145.1	$663.1
HURRICANE & TROPICAL STORM	2002	11	$28.4	Reserve	$21.0	$85.6
WINTER STORMS	2002	11	$4.5	Reserve	$32.5	$51.4
Wind/tornado	May-03	2	$1.4	Expensed	$62.1	$196.7
Tropical Storm	Jun-03	3	$4.3	Reserve	$35.7	$84.2
Hurricane	Sep-03	14	$208.5	Expensed	$293.4	$853.9
WIND STORMS & THUNDERSTORM	2003	11	$4.7	Expensed	$41.9	$32.1
HURRICANE, WIND & ICE STORMS	2003	9.5	$34.9	Expensed	$275.4	$892.8
WIND STORMS	2003	7	$15.2	Deferral	$101.2	$213.3
Wind Storm	Jan-04	5	$5.4	Expensed	$101.2	$213.3
Wind Storm	Mar-04	2.5	$5.0	Expensed	$275.4	$892.8
Thunderstorm	Jun-04	3	$1.6	Expensed	$62.1	$196.7
Hurricane	Sep-04	3	$0.6	Reserve	$35.7	$84.2
Wind Storm	Dec-04	1	$2.0	Expensed	$95.3	$195.7
Ice Storm	Dec-04	5	$14.0	Reserve	$67.0	$223.0
Wind Storm	Dec-04	2	$2.9	Deferral	$101.5	$199.2
SUMMER STORMS	2004	10.1	$7.6	Expensed	$40.6	$119.3
HURRICANES	2004		$890.0	Reserve	$291.6	$917.7
HURRICANES	2004	15	$42.2	Deferral*	$119.0	$830.5
HURRICANES	2004	26	$366.4	Reserve	$120.6	$352.0
HURRICANES	2004		$60.0	Reserve	$45.4	$212.6
ICE STORM & SUMMER STORMS	2004	14	$23.1	Deferred	$70.4	$196.2

Note: CAPITALIZED STORMS indicate multiple major storms in a year

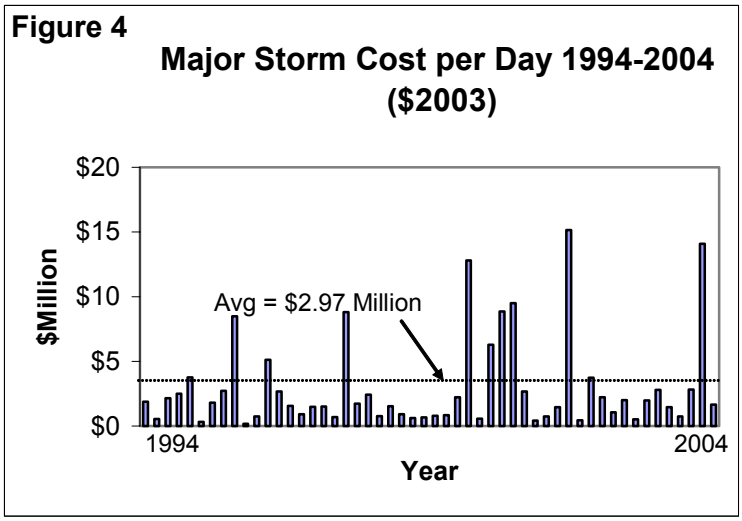
**Assumes storm costs deferred based on commissions prior treatment of costs for major storms*

Figure 3



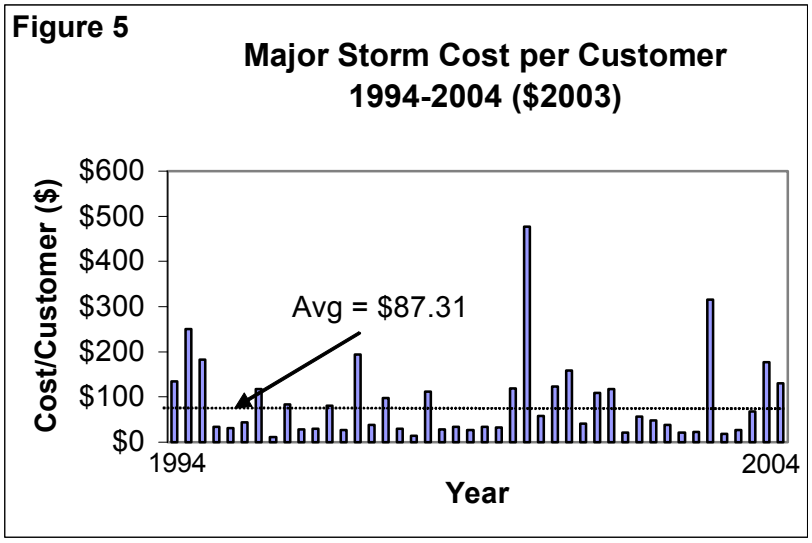
For another perspective on storm costs, consider that on average, utilities spent almost $3 million a day (constant $2003) to repair their systems, but several storm costs exceeded the $10 million per day range (*Figure 4*).

Figure 4



A final perspective on historical storm costs is obtained by calculating storm costs per customer. Figure 5 compares the total costs of the storm (in constant $2003) to the peak number of customers affected by the storm.[3] Average storm cost per peak customer from 1994 to 2004 was approximately $87—about the same amount of revenue that a utility receives each month from a typical residential customer.

Figure 5



Several important conclusions can be drawn from the historical data presented in these charts:

1. Based on the sample of storm data obtained from the surveys, it is evident that utilities incur substantial costs to repair their systems after major storms. Total storm costs between 1994 and 2004 were approximately $2.7 billion ($2003). A large portion of this cost is the result of the huge damage inflicted by a handful of storms that have occurred since 2000.
2. The magnitude of storm restoration costs appears to be random and varies greatly with the type and severity of storms.
3. Utilities mobilize substantial resources to repair their systems after major storms, as is evidenced by the rate at which utilities incur costs during a storm restoration.
4. Average utility storm restoration costs are significant from both a customer and a utility perspective as measured by a storm's cost per customer.

[3] "Peak customers" is used instead of "total customers" because total customers includes customers that incur power outages resulting from utility restoration efforts that may not be related to the storm, e.g. feeder switching.

DETERMINING THE POTENTIAL FINANCIAL IMPACT OF MAJOR STORMS

At an industry level, little is known about the financial impact of major storms. Based on recent media reports of major storms, the potential financial impacts are substantial, even catastrophic.

To better gauge the potential financial impact of major storms, let's examine the impact that very large storms occurring since 2000 had on four companies. Figure 6 evaluates company transmission and distribution (T&D) expenses and net earnings using data from media accounts of storm costs and FERC Form 1 financial data to compare the cost (including capital) of four large storms that occurred since 2000.

The data indicates that storm costs can have a large and potentially devastating financial impact. In some instances, storm costs exceed a company's total earnings and T&D expenses for the entire year.

Figure 6

Storm Description	Date	Storm Cost $Million ($2003)	Financial Impact	
			% of Annual T&D Expenses	% of Net Operating Income
Progress Energy NC Ice Storms	2000	$ 205	259.8%	96.7%
Dominion Energy Hurricane Isabel	2003	$ 212	72.3%	24.8%
Progress Energy Florida Hurricanes	2004	$ 366	303.8%	104.1%
FPL Hurricanes	2004	$ 890	305.2%	97.0%

Source: Press Accounts and FERC Form 1 Data

To assess the potential financial significance of major storms, storm-cost data was compared to net utility operating income and T&D expenses for each company that reported a major storm. *(See Figure 2, page 4.)* If a company reported more than one major storm in a year, the storm costs were combined. These results are summarized in the following charts.

Figure 7 compares storm costs to income and indicates that storm costs could have a significant impact on a utility company's earnings if all of the storm's cost were written off against current earnings. Average storm costs for the 1994-2004 period were approximately 13 percent of net utility operating income. (*See page 8.*)

The chart also indicates considerable volatility from year to year in the potential earnings impact of major storms. In many years, storm costs were significantly less than the 13 percent average, but in other years costs were significantly above average. For three storms, costs nearly equaled the company's operating income for the entire year.

Figure 7

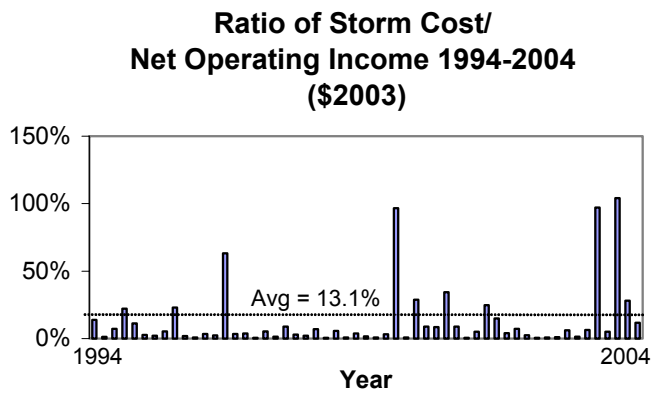
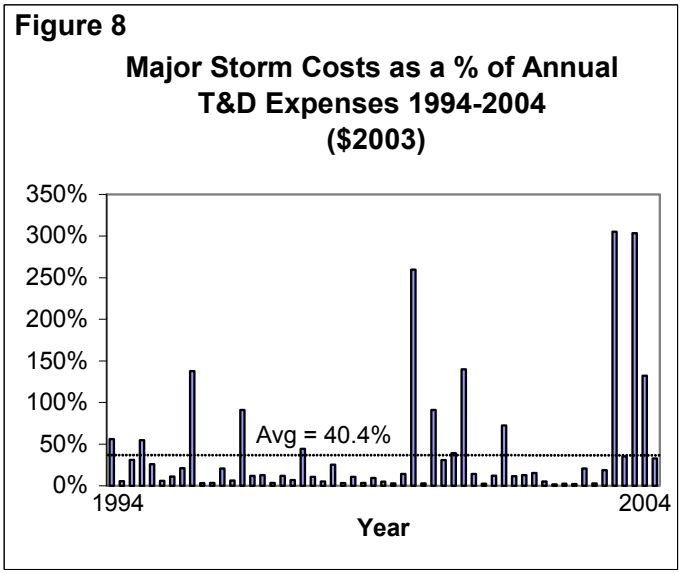


Figure 8 provides another way of gauging the potential impact of major storms by comparing the storm's costs to what the utility spends each year to operate and maintain its entire transmission and distribution system. The data provides another indication of the significant financial impact a storm can have on a utility's financial condition. For those companies hit by a major storm between 1994 and 2004, the costs averaged 40 percent of what the company spent during the year to operate and maintain its entire transmission and distribution system. Several storms exceeded company expenditures for T&D for the year.

Figure 8



The data depicted in these charts does not present a true picture, however, of the actual financial impact of a major storm on a utility. Many regulatory commissions allow accounting policies and special rate treatments that minimize the potentially significant financial costs that storms can inflict. Greater insight into these policies and practices and how they are deployed in the industry is provided in the next section of the report.

PAYING FOR MAJOR STORM RESTORATION

Special accounting and regulatory treatments for storm costs can play a major role in helping utilities recover from the financial impact of a major storm.

Even with the $1.4 billion price tag that the major Florida utilities were faced with for restoring their systems after the 2004 hurricanes (*Figure 9*), Wall Street did not feel compelled to change the credit ratings of any of the major Florida utilities. In deciding to maintain its current ratings, Standard and Poor's cited "storm damage reserves maintained by the utilities, the ability to recover storm-related expenses through rates, a favorable regulatory history with such recovery, and sound liquidity."[4]

However, Standard & Poor's did change its outlook for Progress Energy from stable to negative because of concerns that costs associated with the 2004 hurricanes would delay the company's progress in paying down its high debt levels. Moody's also put the company's ratings under review for possible downgrade, citing the timing of the recovery of storm costs as one of their concerns.

Figure 9
Cost of 2004 Hurricanes for Florida Investor Owned Utilities

	Storm Cost $Million
Florida Power & Light	$ 890
Progress Energy Florida	$ 366
Tampa Electric	$ 60
Gulf Power	$ 109
Total Storm Cost	$ 1,425

Source: Company reports

Accounting for Normal vs. Major Storms

Almost all utilities distinguish between "normal" storms and "major" storms. While there is an IEEE standard definition of a major storm, it is relatively new and not widely used. The general criteria for classifying a storm as "major" depends on whether the storm has a significant impact on a company's customers, i.e. a substantial number of customers are without power for a significant period of time. Baltimore Gas and Electric, for example, defines a major storm as one in which 10 percent of its customers are without power for a day or more. Public Service of New Hampshire defines a major storm as one that results in either (a) 10 percent or more of its customers losing power, resulting in 200 or more reported troubles, or (b) 300 or more reported troubles.[5] Storms that are not classified as major fall under normal accounting rules. Major storms, however, often receive special accounting treatment.

Distinguishing Between Storm Capital and O&M Costs

Major storm expenses are separated into capital and operations and maintenance (O&M) components. Storm capital costs, such as pole and transformer replacements, are treated similarly throughout the industry. They are capitalized on a company's books as a depreciable asset and in most cases are eligible for inclusion in a utility's rate base. Once these costs are included in the rate base, the utility can recover the capital portion of major storm costs from its rate payers.

[4] "Storms Likely to Have Little Effect on U.S. Utility Credit", Sept. 21, 2004, Jodi E. Hecht, Standard & Poor's, New York, New York.
[5] Information provided in company interviews.

In few instances, companies incurring extraordinary storm costs have been allowed to defer capital storm costs and recover them through a special customer surcharge.[6]

While the ratio of capital to O&M costs can vary significantly from storm to storm, a general rule of thumb appears to be that the capital component of a major storm's costs is approximately 20-25 percent of total storm costs.

Recovery of major storm-related O&M costs is different from capital costs. For many companies, expensing major storm costs in the period in which they occur could result in a huge financial burden that could jeopardize the financial standing of the company. The reaction on Wall Street, for example, would have likely been much different if the Florida utilities had been required to expense the O&M component of the 2004 hurricane costs in 2004. Even the possibility of having to incur such a charge could significantly change the level of risk that bondholders and stockholders perceive for a company and increase its overall financing costs.

Storm Insurance

Until Hurricane Andrew in 1992, commercial insurance was widely available at affordable rates to protect against catastrophic storms. FPL, for example had a transmission and distribution system policy with a limit of $350 million per occurrence. The 1992 premium for this policy was $3.5 million. After Hurricane Andrew, commercial insurance carriers stopped writing such policies altogether or made them so expensive that they could not be justified. For example, the quote FPL received in 1993, the year after Hurricane Andrew, was for $23 million for a transmission and distribution system policy with an aggregate annual loss of $100 million.

In lieu of paying for expensive storm insurance, FPL elected to self-insure. It currently funds its storm reserve account at a level of about $20 million a year. This amounts to about 20 cents per month for a typical residential customer.

To help minimize the potential financial consequences of major storms, some utility regulators have allowed their utilities to employ different types of accounting treatments for major storm O&M costs. Generally, major storm O&M expenses that are not expensed receive one of two types of accounting treatments:[7]

1. They are charged to a special storm reserve account, or
2. They are deferred and paid back over an extended period of time.

Each of these accounting treatments is described in more detail on the next page.

[6] Both FPL and Progress Energy Florida have requested that they be allowed to recover their incremental capital costs as well as O&M costs associated with the 2004 hurricanes through a special customer surcharge. In the past, the Florida Public Service Commission allowed capital costs associated with Hurricane Andrew to be recovered through storm reserve accounts.

[7] Co-ops and municipal utilities are an exception. They are eligible to recover 75 percent of their storm costs through FEMA

Utility Storm Reserves

A large number of investor-owned utilities were surveyed to determine how they were accounting and paying for major storm costs. Of the 28 companies contacted, approximately 12, or slightly less than half, indicated that their commissions allowed them to establish special storm reserves (*Figure 10*).

What are these reserves and how do they work?

A storm reserve is an accounting technique that allows utilities to smooth out the earnings impact of major storms. With the exception of FPL, storm reserves are not funded with cash and therefore do not minimize the cash-flow impact of having to pay the costs of a major storm.

When a utility establishes a storm reserve, it credits a fixed amount each year to the reserve through monthly accruals.[8] These monthly accruals are deducted from the current month's earnings even though no actual storm costs are incurred. When a major storm strikes, the storm costs are charged against the balance in the storm reserve account. The reserve, however, provides no cash to pay the actual storm costs.[9]

The big benefit of this type of accounting treatment is that it allows utilities to smooth out the earnings impact of major storms. When a big storm strikes, the only charge to earnings the utility incurs is its normal monthly accrual to its storm reserve account, assuming that it has a balance in its storm reserve account.

Figure 10
Companies with Storm Reserves

Company	Storm Reserve?[1]
Alabama Power	Yes
Avista	No
Baltimore Gas & Electric	No
Black Hills	No
Central Hudson	No
Central Maine Power	No
Cleco	Yes
Connecticut Light & Power	Yes
Duke Power Company	No
Entergy Arkansas	Yes
Florida Power & Light	Yes
Georgia Power	Yes
Gulf Power	Yes
Mississippi Power	Yes
Progress Energy Florida	Yes
Public Service New Hampshire	Yes
Puget Sound Energy	No
Rochester Gas & Electric	Yes
Sierra Pacific	No
Tampa Electric	Yes
Westar	Yes
Western Mass Electric	No
Conectiv	No
Progress Energy Carolinas	No
Dominion	No
Nevada Power	No
Kansas City Power & Light	No
Duquesne Power & Light	No

[1] Note: Many companies have the opportunity to petition their commissions for deferrals of "significant" storm costs, but do not have a formal policy in place to establish a reserve or deferral. Only those companies with established policies for storm reserves are identified in this column.

With the 2004 hurricanes, FPL, Progress Energy Florida, Tampa Electric and Gulf Power all incurred storm related O&M costs that exceeded the balance in their storm reserve accounts. (*See Figure 11, page 12.*) To avoid charging these non-accrued amounts against current earnings, the Florida Public Service Commission allowed each of the Florida utilities to account for the excess as a negative balance in the companies' storm reserve accounts. The Florida Commission indicated that it viewed the negative balance in the storm reserve account as a temporary solution until "an alternative accounting treatment for recovery of prudently incurred

[8] Most companies appear to accrue less than $5 million year. The highest accrual identified was $20 million per year for FPL.

[9] Even with the magnitude of the storm costs that FPL and Progress Energy incurred, rating agencies did not see these costs as a serious threat to overall liquidity; in other words, both companies had sufficient access to commercial paper and bank lines to pay the cash costs of the storms.

storm damage costs…" could be established.[10] This treatment allowed all three companies to avoid taking a charge to earnings in 2004 and helped the companies maintain their credit ratings.[11]

Figure 11
2004 Hurricane Costs vs. Reserve Balances

	Total Storm Cost ($Million)	Reserve Balance Before Storms ($Million)
FPL	$ 890.0	$ 345.0
Progress Energy Florida	$ 366.0	$ 45.4
Tampa Electric	$ 60.0	$ 42.7
Gulf Power	$ 109.0	$ 28.0

Had these reserve funds not been in place and had the Florida Commission not signaled that it was willing to work with the Florida companies to work out a plan for recovering prudently incurred storm costs carried as negative balances in storm-reserve accounts, it is likely that the companies would have suffered a much greater financial impact, which could have jeopardized their ratings and increased their financing costs.

Special Deferrals of Storm Costs

Another accounting technique used to minimize the financial impact of major storms is to defer all or a portion of the storm-related O&M costs. Unlike credits to storm reserve accounts, deferrals typically are not routine events and typically require the utility to ask its commission for special accounting treatment after a major storm causes a significant financial impact on the utility.

When a deferral is established, all or a portion of the storm-related O&M costs are amortized over an extended time period, usually two to three years. The rationale for establishing the deferral is to smooth out the earnings impact of the storm.

Storm costs that are deferred may or may not be recoverable from rate payers. In many instances, the deferred costs are paid for through a special surcharge assessed on each customer's bill until the storm reserve is paid off. Some utilities, however, are expected to pay off the deferred storm costs out of their earnings.

[10] Florida Public Service Commission order in Docket No. 041057-EI, Sept. 21, 2004.
[11] In November 2004, both FPL and Progress Energy requested permission from the Florida Public Service Commission to amortize the negative balances they were carrying in their storm reserve accounts over a two-year period. The amortization would result in a surcharge beginning in January 2005 of $2.09 per month for FPL customers and $3.81 per month for Florida Progress customers.

Figure 12
Examples of Deferred Treatment for Storm Costs

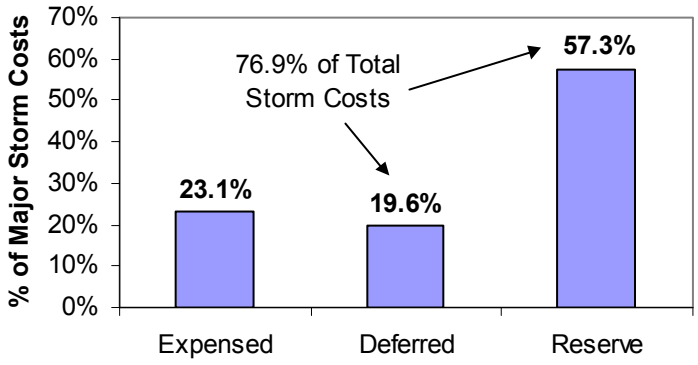
Company	Storm Cost Treatment
Central Maine Power	Total costs for 1998 ice storm were $56 million. FEMA reimbursed $20 million through the state, and $34 million O&M balance was deferred over three years.
Progress Energy Carolina	Usually expenses the first $10 million of O&M costs for large storms. Defers remainder of O&M costs for three years with utility commission approval.
Central Hudson	Deferred expenses for large snowstrom in 1997 and for Hurricane Floyd in 1999.
Kansas City Power & Light	Amortized expenses for 2002 ice storm over five years
Sierra Pacific	O&M portion of 2002 snowstorm ammortized over 4 years
Puget Sound Enegy	Deferred expenses for wind storms in 1996, 1999 and 2003
Conectiv and BG&E	In Maryland, Conectiv and BG&E are allowed to include a historical average of their previous storm costs in the test year costs they use for determining future revenue requirements.

Figure 12 summarizes the deferral accounting treatment some companies have received that allows them to defer their storm costs. Included in the table, even though it is not technically a deferral, is a summary of the special accounting treatment that Conectiv and BG&E receive from the Maryland Public Service Commission that allows them to include an average of historical storm costs in the test year they use for rate cases.

This accounting treatment essentially allows these companies to pre-pay at least a portion of their storm costs by collecting revenues from their customers to pay for storms that have not yet occurred. One shortcoming of this technique is that it does little to smooth out the earnings impact of severe storms such has Hurricane Isabel, which struck in 2003 and required both companies to incur significant charges to earnings in 2003.

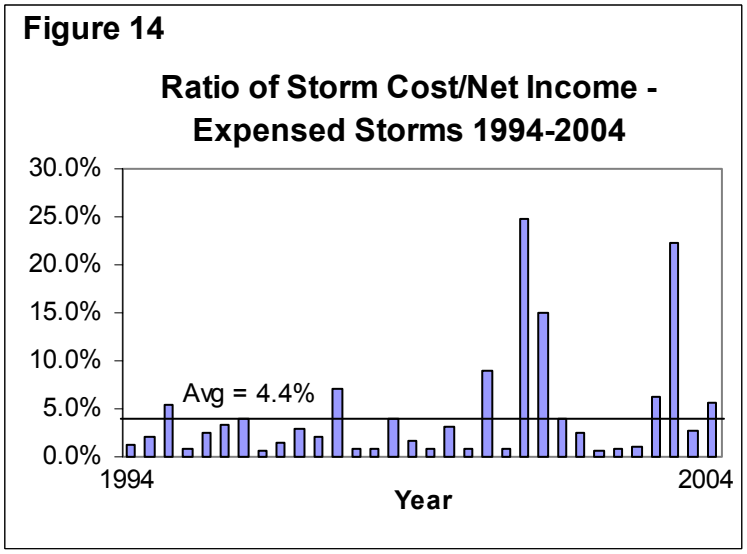
Based on the survey results presented in Figure 2, it appears that substantial portions of storm costs were recovered through existing storm reserves or were eligible for deferred accounting treatment. The data on storm cost accounting treatment is summarized in Figure 13 and indicates that almost 75 percent of total storm costs were covered by some type of storm reserve or deferred accounting treatment. *(See page 14.)* This significantly reduces the financial impact of the storm.

Figure 13



The remaining storms' costs are expensed. While the costs of these expensed storms were significant, they appear "manageable." Figure 14 compares the ratio of storm costs obtained from the survey to net operating income. On average the major storm costs that were expensed equaled 4.4 percent of net operating income. This is about a third of what the average would have been if the storm costs eligible for storm reserve and deferred accounting treatment had been included. (*See Figure 7, page 8.*) Equally significant, only a handful of the expensed storms were significantly above the 4.4 percent average.

Figure 14



There are no assurances, however, that utilities will continue to receive the favorable regulatory treatment for recovery of storm costs that they received in the past. The whole issue of storm cost recovery appears to be becoming more politicized in the current environment. For example, on Nov. 17, 2004, the Florida Office of Public Counsel and the Florida Industrial Power Users Group filed motions with the Florida Public Service Commission requesting that it deny FPL's and Progress Energy Florida's petitions to establish special customer surcharges to pay for hurricane costs.

CONCLUSION & RECOMMENDATIONS

Storms are expensive. The EEI survey identified 81 storms between 1994 and 2004 that caused approximately $2.7 billion ($2003) in damage to electric utility systems. While this is a big number, it is only a fraction of the regional economic losses resulting from being without power in the aftermath of a large storm. With this kind of societal impact, it is clearly in everyone's best interest to restore power as quickly as possible.

Because of the high costs utilities incur in their storm restoration efforts, there is a potential for large financial losses for individual utilities. For more than 75 percent of the major storm costs identified in the survey, the financial impacts were mitigated through storm reserves or deferral of storm costs. For the 25 percent of storm costs that were written off, the financial impact, with a few exceptions, did not appear to present a major financial hardship.

Of concern, however, is the uncertainty that surrounds storm cost recovery and the degree to which storm recovery is becoming politicized. The industry knows that large storms will occur and it knows that the financial consequences of these storms could be significant and in some cases catastrophic. Despite this, recovery of costs for most major storms is dealt with after the fact. This makes it difficult for utility managers to plan and creates uncertainty on Wall Street.

What is ironic, given the importance of storm restoration, is that more established and consistent policies regarding storm cost recovery are not in place. From a cost recovery standpoint, why is recovery of storm restoration costs any different than recovery of insurance premiums? Both represent a cost item for operating a modern utility. Yet, the industry has vastly different philosophies regarding cost recovery of these two items.

Given the lack of commercially available storm insurance at affordable rates, the industry should adopt a self-insurance mechanism for storms, either within individual companies or possibly on an industry basis. Looking at the establishment of a storm reserve with regulatory approvals for monthly reserve accruals or possibly even cash deposits is a good starting point.

The storm reserve funds identified in this report do what they were intended to do—minimize the financial impact of major storms at an affordable cost ($.20/month for a typical FPL residential customer). With Wall Street starting to focus on this issue, consideration must be given to establishing reserves as a type of "rainy day fund" for when it becomes necessary to offset the serious economic impact of future storm restoration.

ATTACHMENT A: SAMPLE SURVEY

EEI Major Storm Restoration Cost Survey

EEI is seeking member company support in obtaining historical data that can be used to quantify the financial impact of major storms on utilities and their customers (e.g. Hurricane Isabel, 2002 North Carolina ice storm).

Please complete the following survey form for the 10 most severe storms your company has experienced since 1994. Use peak number of customers out of service to rank storm severity. Please provide all storm data at the operating company level, not the holding company level. Holding companies should complete a separate survey form for each operating company they are providing storm data for.

Completed surveys should be e-mailed to William Mayer at wmayer@eei.org by ***November 5, 2004*** .
All questions should be addressed to William Mayer at 202-508-5563

Note: All specific company data will remain confidential. No company names will be released in any storm-data reports.

Operating company name: _____

Name of individual completing survey: _____
Individual contact information:
Phone number: _____
E-mail address: _____

MAJOR STORM RESTORATION COST DATA

		STORM IMPACT					STORM COST
				CAIDI Data		MWhrs of	
Major Storm Event	Date	Outage Duration (Days)	Peak # Customers Out	Sum of Customer Outage Durations (Hours)	Total Customers Interrupted During Storm	load not served (MWhrs)	Restoration Cost (Storm Yr $)
Hurricane 1 (Sample Data)	Oct-97	6	310,000	22,500,000	450,000	648,000	$ 42,000,000

METHOD OF RECOVERING STORM COSTS

Major Storm Event	Method of Cost Recovery (expensed, reserve account, deferral account, other)	Brief summary of any special actions taken with respect to recovering storm costs
Hurricane 1	Expensed	Commission did not allow deferral of storm costs

Survey Instructions

Please complete the attached storm restoration survey form. All data should be provided at the operating company level. For holding companies, separate survey forms should be completed for each operating company for which storm data is being provided.

Major Storm Event:
A major storm event is defined as a storm resulting in a multi-day outage for a significant percentage of total customers. Please indicate the type of storm, e.g. hurricane, ice storm, snowstorm, or wind and lightning storm in your response.

Date:
Please indicate the month and year storm restoration work was completed.

Outage Duration:
Number of days to restore system following the storm.

Peak Number of Customers Out:
The largest number of customers simultaneously without power during the storm event.

Total Duration of Customer Interruptions:
The duration of customer outages is calculated by adding the customer-hours of interruptions experienced during the storm period. For example, if 200 customers were out of power for 30 hours and 500 customers were out of power for 20 hours, the duration of customer outages would be (200 x 30) + (500 x 20) = 16,000 customer hours. (Calculate in the same manner as the duration of customer interruptions is calculated for the CAIDI Index).

Total Customers Interrupted:
The total number of customers without power at some point during the storm event. Note: some customers may experience multiple outages during a storm event. These outages should be treated as separate outage incidents attributed to the storm. (Calculate in the same manner as the total number of customers is calculated for the CAIDI Index).

MWhrs of Load Not Served:
The estimate of the difference between the MWhr sales to ultimate customers that actually occurred during the storm restoration period and the sales that would have occurred if the storm had not happened.

Restoration Cost:
The estimate of the total direct costs incurred to provide storm restoration. Costs should be reported in storm year dollars, i.e. no escalation for inflation.

Accounting Treatment of Storm Costs:
Briefly describe how storm costs are accounted for, i.e. expensed against current year earnings, charged to a special reserve account set up to pay for storm costs, deferred through a special reserve account or any other accounting treatments that have been used for storm related costs. Briefly describe any special actions taken with respect to recovering storm costs such as requesting a rate increase to recover storm related costs.

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